

Amendments To the Claims:

Please amend the claims as shown. Applicants reserve the right to pursue any cancelled claims at a later date.

1.-30. (Canceled)

31. (Currently Amended) A method of communicating information, comprising:

at a first client, forming a first signal message by encapsulating a point-to-point signal data unit within a network address request header, wherein the point-to-point signal data unit comprises a header including an identifier associated with a second client and a payload comprising information to be communicated to the second client;

at a tunneling server, receiving the first signal message, removing the network address request header, and encapsulating the point-to-point signal data unit within a network address response header to form a second signal message; and

communicating the second signal message toward the second client.

32. (Original) The method of Claim 31, wherein the network address request header comprises a Dynamic Host Configuration Protocol DISCOVER header or a Bootstrap Protocol REQUEST header.

33. (Original) The method of Claim 31, wherein the network address response header comprises a Dynamic Host Configuration Protocol OFFER header or a Bootstrap Protocol RESPONSE header.

34. (Currently Amended) The method of Claim 31, wherein the point-to-point signal data unit is encapsulated within a tunneling header prior to being encapsulated into the network address request header, the tunneling header operable to facilitate maintenance of a tunneling session between the tunneling server and the first client.

35. **(Original)** The method of Claim 34, wherein the tunneling header comprises a tunneling header selected from the group consisting of a Layer Two Tunneling Protocol (L2TP) header, a Point to Point Tunneling Protocol (PPTP), or a Layer Two Forwarding (L2F) header.

36. **(Currently Amended)** A method of communicating in an enterprise network, comprising:

at a tunneling server, receiving from a first client a first signal message, the first signal message formed by encapsulating a point-to-point signal data unit within a network address request header, the point-to-point signal data unit comprising a first header that includes an identifier associated with a second client, and a payload comprising information to be communicated to the second client;

encapsulating the first signal message within a network address response header to form a second signal message; and

communicating the second signal message toward the second client.

37. **(Original)** The method of Claim 36, wherein the network address request header comprises a Dynamic Host Configuration Protocol DISCOVER header or a Bootstrap Protocol REQUEST header.

38. **(Original)** The method of Claim 36, wherein the network address response header comprises a Dynamic Host Configuration Protocol OFFER header or a Bootstrap Protocol RESPONSE header.

39. **(Currently Amended)** The method of Claim 36, wherein the point-to-point signal data unit is encapsulated within a tunneling header, the tunneling header operable to facilitate maintenance of a tunneling session between the tunneling server and the first client.

40. **(Original)** The method of Claim 39, wherein the tunneling header comprises a tunneling header selected from the group consisting of a Layer Two Tunneling Protocol (L2TP) header, a Point to Point Tunneling Protocol (PPTP), or a Layer Two Forwarding (L2F) header.

41. **(Currently Amended)** The method of Claim 36, wherein the point-to-point ~~signal~~ data unit is encapsulated within a tunneling header, the tunneling header operable to facilitate maintenance of a tunneling session between the tunneling server and the second client.

42. **(Currently Amended)** The method of Claim 36, wherein communicating the second ~~signal~~ message toward the second client comprises communicating the second ~~signal~~ message toward a router operable to relay the second ~~signal~~ message toward the second client without referencing a routing table indexed by data channel addresses.

43. **(Original)** The method of Claim 42, wherein the identifier comprises a control channel address identifying the second client, the control channel address being different than any data channel address recognized by the router.

44. **(Original)** The method of Claim 36, wherein the identifier comprises an identifier of the second client other than a control channel address, and further comprising accessing a memory to determine, based on the identifier, a control channel address of the second client.

45. **(Currently Amended)** The method of Claim 36, wherein the point-to-point ~~signal~~ data unit comprises information to be applied to an application residing at the second client.

46. **(Original)** The method of Claim 45, wherein the application residing at the second client comprises a maintenance application operable to diagnose operational characteristics of the second client.

47. **(Currently Amended)** The method of Claim 36, wherein the point-to-point ~~signal~~ data unit comprises at least a portion of an application to be installed on the second client.

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48. **(Currently Amended)** The method of Claim 36, further comprising removing the network address request header before encapsulating the first signal message within the network address response header.

49. **(Currently Amended)** A computer readable medium operable to execute the following steps on a processor of a computer:

at a tunneling server, receiving from a first client a first signal message formed by encapsulating a point-to-point signal data unit within a network address request header, the point-to-point signal data unit comprising a first header that includes an identifier associated with a second client, and a payload comprising information to be communicated to the second client;

removing the point-to-point signal data unit from the first signal message;

encapsulating the point-to-point signal data unit within a network address response header to form a second signal message; and

communicating the second signal message toward the second client.

50. **(Currently Amended)** The computer readable medium of Claim 49, wherein the point-to-point signal data unit is encapsulated within a tunneling header, the tunneling header operable to facilitate maintenance of a tunneling session between the tunneling server and the first client.

51. **(Currently Amended)** The computer readable medium of Claim 49, wherein the point-to-point signal data unit is encapsulated within a tunneling header, the tunneling header operable to facilitate maintenance of a tunneling session between the tunneling server and the second client.

52. **(Currently Amended)** The computer readable medium of Claim 49, wherein communicating the second signal message toward the second client comprises communicating the toward a router operable to relay the second signal message to the second client without referencing a routing table indexed by data channel addresses.

53. **(Currently Amended)** The computer readable medium of Claim 52, wherein the point-to-point ~~signal~~ data unit comprises a control channel address identifying the second client, the control channel address being different than any data channel address recognized by the router.

54. **(Original)** The computer readable medium of Claim 49, wherein the first identifier comprises an identifier other than a control channel address of the second client, and further comprising accessing a memory to determine, based on the identifier, a control channel address of the second client.

55. **(Currently Amended)** The computer readable medium of Claim 49, wherein the point-to-point ~~protocol-signal~~ data unit comprises information to be applied to an application residing at the destination client.

56. **(Currently Amended)** The computer readable medium of Claim 49, wherein the point-to-point ~~protocol-signal~~ data unit comprises at least a portion of an application to be installed on the second client.

57. **(Canceled)**

58. **(Currently Amended)** In an enterprise network comprising at least one client coupled to a tunneling server, a tunneling server comprising:

a tunneling module operable to receive a first ~~signal~~ message formed by encapsulating a point-to-point ~~signal~~ data unit within a network address request header; and

a protocol stack operable to process at least a portion of the point-to-point ~~signal~~ data unit to identify a control channel address associated with a destination client;

wherein the tunneling module is further operable to encapsulate the first point-to-point ~~signal~~ data unit within a network address response header to form a second ~~signal~~ message and wherein the tunneling server is operable to communicate the second ~~signal~~ message toward the destination client.

59. **(Original)** The tunneling server of Claim 58, wherein the network address request header comprises a Dynamic Host Configuration Protocol DISCOVER header or a Bootstrap Protocol REQUEST header.

60. **(Original)** The tunneling server of Claim 58, wherein the network address response header comprises a Dynamic Host Configuration Protocol OFFER header or a Bootstrap Protocol response header.

61. **(Currently Amended)** The tunneling server of Claim 58, wherein the point-to-point signal data unit comprises a control channel address identifying the destination client, and wherein the tunneling server is further operable to communicate the first signal message toward a router for forwarding to the destination client without reference to a routing table indexed by data channel addresses.

62. **(Currently Amended)** The tunneling server of Claim 58, wherein the point-to-point signal data unit is encapsulated within a tunneling header and further encapsulated within the network address request header, and wherein the tunneling module is operable to process the tunneling header to maintain a tunneling session between the tunneling server and a client originating the first signal message.

63. **(Original)** The tunneling server of Claim 62, wherein the tunneling header comprises a tunneling header selected from the group consisting of a Layer Two Tunneling Protocol (L2TP) header, a Point to Point Tunneling Protocol (PPTP), or a Layer Two Forwarding (L2F) header.

64. **(Currently Amended)** The tunneling server of Claim 58, wherein the tunneling module is operable to encapsulate the point-to-point signal data unit within a tunneling header before encapsulating the first point-to-point protocol data unit within the network address response header, the tunneling header operable to facilitate maintenance of a tunneling session between the tunneling server and the destination client.

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65. **(Currently Amended)** The tunneling server of Claim 58, wherein the point-to-point ~~signal~~ data unit comprises a payload comprising information to be applied to an application residing at the destination client.

66. **(Original)** The tunneling server of Claim 65, wherein the payload comprises information to be applied to a maintenance application residing at the destination client and operable to diagnose operational characteristics of the destination client.

67. **(Currently Amended)** A system operable to facilitate communication with a destination client in an enterprise network, the system comprising:

a first client comprising:

a protocol stack operable to generate a point-to-point ~~signal~~ data unit; and

a tunneling module operable to encapsulate the point-to-point ~~signal~~ data unit within a network address request header to form a first ~~signal~~ message;

wherein the first client is operable to communicate the first ~~signal~~ message toward a tunneling server; and

a tunneling server comprising:

a tunneling module operable to receive the first ~~signal~~ message; and

a protocol stack operable to process at least a portion of the point-to-point ~~signal~~ data unit to identify a control channel address associated with a destination client;

wherein the tunneling module is further operable to encapsulate the point-to-point ~~signal~~ data unit within a network address response header to form a second ~~signal~~ message and wherein the tunneling server is operable to communicate the second ~~signal~~ message toward the destination client.